

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

1-6. (Canceled)

7. (Currently Amended) A method of providing a code assist function which suggests candidates responsive to a parsing of a partial program instruction statement, said method comprising:

parsing a partial program instruction statement into tokens divided into keywords and variables;

determining whether the tokens match one of a plurality of syntax statements in a syntax library for a computer language in which the partial program instruction statement is written;

moving a cursor positioned on one of the tokens for which the match is determined to a following token in response to determining that the token matches one of the syntax statements in the syntax library;

in response to determining that the token on which the cursor is positioned does not match one of the syntax statements generating proposals from the cursor position based on previous tokens in the partial program instruction that matched syntax statements in the syntax library;

providing proposals to append to the partial program instruction statement to a user responsive to the parsing of the partial program instruction statement.

8. (Original) The method of claim 7 further comprising:  
proposing an identified variable as a proposal responsive to a verb of the partial program instruction statement.

9. (Original) The method of claim 7 further comprising:  
proposing an identified variable as a proposal responsive to a variable type of the variable.

10 (Previously Presented) The method of claim 7 further comprising:  
proposing an identified variable as a proposal responsive to a verb of the partial program instruction statement or responsive to a variable type of the variable.

11. (Original) The method of claim 7 further comprising:  
proposing an identified variable as a proposal responsive to a portion of the program containing the partial program instruction statement.

12. (Original) The method of claim 7 wherein the parsing of the program and the parsing of the partial program instruction statement are performed according to a user-selected programming language dependent file selected from a plurality of programming language dependent files.

13-19. (Canceled)

20. (Currently Amended) The method of claim 7, further comprising:  
determining whether an end of the partial program instruction statement is reached; and  
in response to determining that the end of the program instruction statement is reached, generating proposals.

21. (Canceled)

22. (New) The method of claim 7, further comprising:  
determining the computer language in which the partial program instruction statement is written; and  
selecting one of a plurality of syntax libraries to use to determine whether the tokens match one of the plurality of syntax statements in the syntax library specific to the determined computer language.

23. (New) The method of claim 7, wherein the partial program instruction statement is parsed based upon syntax statements from the syntax library.

24. (New) The method of claim 7, further comprising:  
generating a cursor index when moving the cursor indicating last matching tokens in the partial program instruction; and  
wherein generating proposals comprises generating proposals from the cursor index position for the last matched token

25. (New) The method of claim 24, wherein generating proposals comprises:  
generating proposals from the last matching token; and  
adding the proposals to a proposal vector.

26. (New) The method of claim 25, wherein proposal vectors are generated from multiple cursor engines parsing different parts of the program statements;  
concatenating the proposal vectors to create a combined proposal vector that is returned;  
matching the combined proposal vector to determine an image;  
displaying a window containing the determined image from which the user select a keyword, identifier or constant to continue entry of the partial program statement.